Contents

Volume 181 (1987)

Special Issue

DNA Damage and Repair in Higher Plants and Their Relation to Genetic Damage

edited by J. Véleminský and T. Gichner

Preface	
by J. Véleminský and T. Gichner (Czechoslovakia)	vii
Research Papers	
The repair of ultraviolet light-induced DNA damage in plant cells (MTR 04377)	
by A.G. McLennan (Great Britain)	1
Chromosome and DNA damage and their repair in higher plants irradiated with short-wave ultraviolet light (MTR 04435)	
by K.G.K. Cieminis, V.M. Rančelienė, A.J. Prijalgauskienė, N.V. Tiunaitienė, A.M. Rudzianskaitė and Z.J. Jančys	9
(U.S.S.R.)	9
DNA repair in pollen. A review (MTR 04378)	10
by J.F. Jackson (Australia)	17
by G.D. Small (U.S.A.)	31
The apparent lack of repair of O ⁶ -methylguanine in nuclear DNA of Chlamydomonas reinhardtii (MTR 04416)	
by B.F. Frost and G.D. Small (U.S.A.). Formation, detection and repair of AP sites (MTR 04415)	37
by M. Talpaert-Borlè (Italy)	45
Appearance and repair of apurinic/apyrimidinic sites in DNA during early germination of Zea mays (MTR 04367)	-
by E. Dandoy, R. Schyns, R. Deltour and W.G. Verly (Belgium)	57
DNA ligase in repair and replication in the embryos of rye, Secale cereale (MTR 04467)	3,
by R.H. Elder, A. Dell'Aquila, M. Mezzina, A. Sarasin and D.J. Osborne (Great Britain, Italy, France)	61
Interaction of the mutagenic metabolite of sodium azide, synthesized in vitro, with DNA of barley embryos (MTR 04433)	0,
by J. Velemínský, J.L. Rosichan, M. Juříček, A. Kleinhofs, R.A. Nilan and T. Gichner (Czechoslovakia, U.S.A.)	73
DNA polymerases from plant cells (MTR 04379)	
by S. Litvak and M. Castroviejo (France)	81
Properties of a DNA primase from rice cells (MTR 04432)	0.
by M.L. Marchesi, F. Villaggi, S. Spadari, G. Pedrali-Noy and F. Sala (Italy)	93
Effect of benzyl adenine on the DNA synthesis during early germination of maize embryo axes (MTR 04480)	7.
by M. Zarain H., I. Bernal-Lugo and J.M. Vázquez-Ramos (México)	103
Excision repair of uracil in higher plant cells: uracil-DNA glycosylase and sister-chromatid exchanges (MTR 04434)	10.
	111
by C. Gutierrez (Spain)	111
Sister-chromatid exchanges in higher plant cells: past and perspectives (MTR 04426)	100
by J.B. Schvartzman (Spain)	12
Mutations in rDNA	
 Is translocation involvement of barley nucleolus organizer regions influenced by chromatin architecture? (MTR 04456) 	
by H. Nicoloff, R. Rieger and G. Russev (D.D.R., Bulgaria)	147

Clastogenic adaptation of plant cells — reduction of the yield of clastogen-induced chromatid aberrations by various pretreatment procedures (MTR 04427)	
by K. Heindorff, R. Rieger, I. Schubert, A. Michaelis and O. Aurich (G.D.R.)	157
Comparison with corresponding effects in cultured human lymphocytes (MTR 04425) by H.C. Andersson and B.A. Kihlman (Sweden)	173
Fast rejoining of chromosomes after fractionated exposures to ionizing radiations of plant seeds (MTR 04424) by J. Moutschen, M. Moutschen-Dahmen and J. Gilot-Delhalle (Belgium)	187
Somatic mutation in cereals (MTR 04451) by T. Ikushima (Japan)	199
Induced somatic mutations by radiation and chemicals in Tradescantia (MTR 04457) by S. Tano (Japan)	209
[end of special issue]	
Special Issue	
Dynamics of the Genome	
edited by A. Léonard and M. Kirsch-Volders	
Preface	
by A. Léonard and M. Kirsch-Volders (Belgium)	v
DNA methylation and epigenetic defects in carcinogenesis (MTR 04369) by R. Holliday (Great Britain)	215
Current understanding of UV-induced base pair substitution mutation in E. coli with particular reference to the DNA polymerase III complex (MTR 04455)	210
by B.A. Bridges, R. Woodgate, M. Ruiz-Rubio, F. Sharif, S.G. Sedgwick and U. Hübscher (Great Britain, Switzerland)	219
DNA methods for detecting and analyzing mutations in vivo (MTR 04437) by P.H.M. Lohman, J. Vijg, A.G. Uitterlinden, P. Slagboom, J.A. Gossen and F. Berends (The Netherlands)	227
Carcinogenic potency in rodents versus genotoxic potency in E. coli: a correlation analysis for bifunctional alkylating agents (MTR 04484)	221
by I. Quinto and M. Radman (Italy, France) Relationships between structure and mutagenic activity of environmental chemicals (MTR 04446)	235
by M.M. Shahin (France) Mechanisms of aneuploid induction (MTR 04393)	243
by D.J. Bond (Great Britain) Comparisons of tests for aneuploidy (MTR 04464)	257
by J.M. Parry and E.M. Parry (Great Britain)	267
Epidemiology in protection and prevention against environmental mutagens/carcinogens Examples from occupational medicine (MTR 04414)	
by A. Forni and P.A. Bertazzi (Italy) Environmental mutagenesis in retrospect (MTR 04438)	289
by F.H. Sobels (The Netherlands)	299
European Environmental Mutagen Society	
Abstracts of the 16th Annual Meeting of the European Environmental Mutagen Society (EEMS) (MTR 04468)	311
[end of special issue]	
Contents, Vol. 181 (1987)	355

